

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Applicants: Meluch et al.  
Appl. No.: 09/767,558  
Filed: January 22, 2001  
Title: MELT-SPUN POLYSULFONE SEMIPERMEABLE MEMBRANES AND  
METHODS FOR MAKING THE SAME  
Art Unit: 1723  
Examiner: A. Fortuna  
Docket No.: ACT-5612 CON of DIV I

Commissioner for Patents  
Washington, DC 20231

**AFFIDAVIT OF SHMUEL STERNBERG UNDER 37 C.F.R. § 1.132**

Sir:

I, Shmuel Sternberg, hereby state as follows:

1. I am currently an employee of Baxter International, Inc., holding the title of Baxter Distinguished Scientist. My educational background is as follows: B. CH.E - Georgia Institute of Technology (Georgia Tech); M.Sc. - Carnegie Institute of Technology (Carnegie-Mellon University); and Ph.D. - Case Western Reserve University. My professional experience is as follows: Amicon Corporation - Senior Engineer; Abcor Corporation (now Koch Membranes) - Manager, Materials Development; Millipore Corporation - Manager of Research; Memtek Corporation - Vice President of Research and Development; and Baxter Healthcare - Senior Technical Director, Baxter Distinguished Scientist. I have been involved in polymeric membrane research and development since my doctoral work in 1965 and throughout my industrial career.

2. I have reviewed U.S. Patent Application Serial No. 09/767,558 entitled "MELT-SPUN POLYSULFONE SEMIPERMEABLE MEMBRANES AND METHODS FOR MAKING THE SAME." I am familiar with polysulfone membranes and methods of making same.

3. I understand that the United States Patent and Trademark Office has rejected the claims of U.S. Serial No. 09/767,558 based on U.S. Patent No. 5,279,739 ('739 patent). I have reviewed the '739 patent.

4. The '739 patent relates to polymeric compositions useful in membrane technology. More specifically, the '739 patent relates to the fractionation of polymers to provide more chlorine resistant flexible polymers that can be used for the manufacture of membranes. The membranes that are envisioned by the '739 patent are designed for ultrafiltration.

5. The '739 patent is silent as to the exact formulations used to fabricate the example membranes. Rather, ranges of bath compositions and diluent solutions are provided, but one cannot make the specific membrane tested from the information in the patent. As one skilled in the art, I can state clearly, that the '739 patent does not disclose, or suggest, a melt-spinning process for making a membrane.


6. As one skilled in the art reviewing the '739 patent, I would not be led to a conclusion that a symmetric membrane would be created. Indeed, as one skilled in the art, I believe that the '739 patent is directed to the construction of an asymmetric membrane. In this regard, the patent discusses ultrafiltration and ultrafiltration membranes. All ultrafiltration membranes, to the best of my knowledge, include a layer of skin and are asymmetric. See, for example, *Handbook of Industrial Membrane Technology*, pp. 136-138 (attached hereto as Exhibit A) and *Membrane Handbook*, pp. 908 and 422 (attached hereto as Exhibit B).

7. Accordingly, to the extent that the '739 patent is being relied upon to disclose or even suggest to one skilled in the art, a membrane constructed from a melt-spun process or a symmetric membrane, the rejection is erroneous from a technical standpoint. The '739 patent does not disclose or suggest a melt-spun process. Nor would the '739 patent disclose or suggest to one skilled in the art the production of a symmetric membrane.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States

Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Date: Feb 27, 2002

  
Shmuel Sternberg